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NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)
No. 5, Jalan Anggerik Mokara 31/45, Seksyen 31, Kota Kemuning, 40460 Shah Alam, Selangor Darul Ehsan, Malaysia.
Tel: 03-5122 9766/7/8 Fax: 03-5122 8766/7 E-mail: info@nusatek.com

Our Ref. : NT/103679/18-06

Report No: NDT/RT/180549-01/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	PMI-Technology Sdn Bhd	Procedure No:	NT/RT/ASME Rev 7.0
Project :	PMI-WPS-AS-10H/8-F-126	IQI type :	ASTM 1B
Material:	SA 240 UNS S32205 TP SA 240 TP 304/L	Film Manufacturer/Type :	FUJI 50(class I)
		Density :	2.0 - 3.5
		Sensitivity:	0.33mm(5 wires visible)
		Source to Object Distance :	400mm
		Source Side of Object to Film Distance:	(8+3)mm
Welding Process :	FCAW	No of Radiograph(exposure) :	Single Exposure
Examination Code :	ASME V	No. of Film Each Cassette :	1 Film
Acceptance Code:	ASME Section IX ; 2017 Edition.	Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
Examination Date:	15 May 2018	Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
Chen Chee Kheong 761028-08-6103 (W-028) 3G	11	3	--	8	0 - 1	Sur	Accept	

End of Report

Legend:

TI : Tungsten Inclusion	NRI : No Relevant Indication	UN : Undercut	Por : Porosity	WT : Weld Thickness
SI : Slag Inclusion	LP : Lack of Penetration	Con : Concavity	BT : Burn Through	RT : Reinforcement Thickness
LF : Lack of Fusion	EP : Excess Penetration	AR : Artifact	Sur : Surface	

Personnel Particulars

Radiographer :	Emirsham - NDT Lev. II		Client Representative:
Interpreted & Evaluated By:	M.Nazib - NDT Lev.II	NUSANTARA TECHNOLOGIES SDN. BHD. * (187753-D) * NDT Division	
Date:	16 May 2018		Name: Date:

NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)
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Our Ref. : NT/103679/18-06

Report No: NDT/RT/180549-02/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	PMI-Technology Sdn Bhd
Project :	PMI-WPS-AS-10H/10H-F-123
Material:	SA 240 UNS S32205 TP SA 240 UNS S32205
Welding Process :	FCAW
Examination Code :	ASME V
Acceptance Code:	ASME Section IX ; 2017 Edition.
Examination Date:	15 May 2018

Procedure No:	NT/RT/ASME Rev 7.0
IQI type :	ASTM 1B
Film Manufacturer/Type :	FUJI 50(class I)
Density :	2.0 - 3.5
Sensitivity:	0.33mm(5 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(8+3)mm
No of Radiograph(exposure) :	Single Exposure
No. of Film Each Cassette :	1 Film
Radiographic Technique :	SWSI
Film Viewing Technique :	Single Wall Viewing
Source Type/Size :	Iridium192 (3.2mm)
Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
Phang Chee Heong 690519-08-6279 (W-012) 3G	11	3	–	8	0 - 1	NRI	Accept	

End of Report

Legend:

TI : Tungsten Inclusion	NRI : No Relevant Indication	UN : Undercut	Por : Porosity	WT : Weld Thickness
SI : Slag Inclusion	LP : Lack of Penetration	Con : Concavity	BT : Burn Through	RT : Reinforcement Thickness
LF : Lack of Fusion	EP : Excess Penetration	AR : Artifact	Sur : Surface	

Personnel Particulars

Radiographer : Emirsham - NDT Lev. II

Interpreted & Evaluated By: M.Nazib - NDT Lev.II

Date: 16 May 2018

Client Representative:

Name:

Date:

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NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)
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Our Ref. : NT/103679/18-06

Report No: NDT/RT/180549-03/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	PMI-Technology Sdn Bhd
Project :	PMI-WPS-AS-10H/10H-S-124
Material:	SA 240 UNS S32205 TP SA 240 UNS S32205
Welding Process :	SMAW
Examination Code :	ASME V
Acceptance Code:	ASME Section IX ; 2017 Edition.
Examination Date:	15 May 2018

Procedure No:	NT/RT/ASME Rev 7.0
IQI type :	ASTM 1B
Film Manufacturer/Type :	FUJI 50(class I)
Density :	2.0 - 3.5
Sensitivity:	0.33mm(5 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(8+3)mm
No of Radiograph(exposure) :	Single Exposure
No. of Film Each Cassette :	1 Film
Radiographic Technique :	SWSI
Film Viewing Technique :	Single Wall Viewing
Source Type/Size :	Iridium192 (3.2mm)
Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
Chan Yeng Meng 650104-08-5725 (W-004) 3G	11	3	–	8	0 - 1	Por / Sur	Accept	

End of Report

Legend:

TI : Tungsten Inclusion	*NRI : No Relevant Indication*	*UN : Undercut*	*Por : Porosity*	*WT : Weld Thickness*
SI : Slag Inclusion	*LP : Lack of Penetration*	*Con : Concavity*	*BT : Burn Through*	*RT : Reinforcement Thickness*
LF : Lack of Fusion	*EP : Excess Penetration*	*AR : Artifact*	*Sur : Surface*	

Personnel Particulars

Radiographer : Emirsham - NDT Lev. II

Interpreted & Evaluated By: M.Nazib - NDT Lev.II

Date: 16 May 2018

Client Representative:

Name:

Date:

NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)
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Our Ref. : NT/103679/18-06

Report No: NDT/RT/180549-04/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	PMI-Technology Sdn Bhd	Procedure No:	NT/RT/ASME Rev 7.0
		IQI type :	ASTM 1B
Project :	PMI-WPS-AS-10H/10H-F-127	Film Manufacturer/Type :	FUJI 50(class I)
		Density :	2.0 - 3.5
Material:	SA 240 UNS S32205 TP SA 240 UNS S32205	Sensitivity:	0.33mm(5 wires visible)
		Source to Object Distance :	400mm
		Source Side of Object to Film Distance:	(25+3)mm
Welding Process :	FCAW	No of Radiograph(exposure) :	Single Exposure
Examination Code :	ASME V	No. of Film Each Cassette :	1 Film
Acceptance Code:	ASME Section IX ; 2017 Edition.	Radiographic Technique :	SWSI
		Film Viewing Technique :	Single Wall Viewing
Examination Date:	15 May 2018	Source Type/Size :	Iridium192 (3.2mm)
		Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
Wong Yau Chong 640612-08-5793 (W-038) 3G	28	3	–	25	0 - 1	SI	Reject	

End of Report

Legend:

TI : Tungsten Inclusion	NRI : No Relevant Indication	UN : Undercut	Por : Porosity	WT : Weld Thickness
SI : Slag Inclusion	LP : Lack of Penetration	Con : Concavity	BT : Burn Through	RT : Reinforcement Thickness
LF : Lack of Fusion	EP : Excess Penetration	AR : Artifact	Sur : Surface	

Personnel Particulars

Radiographer : Emirsham - NDT Lev. II

Interpreted & Evaluated By: M.Nazib - NDT Lev.II

Date: 16 May 2018

Client Representative:

Name:

Date:

NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)
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Our Ref. : NT/103679/18-06

Report No: NDT/RT/180549-05/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	PMI-Technology Sdn Bhd
Project :	PMI-WPS-EN-8/8-A-135
Material:	SA 240 GR 304 To SA 240 GR 304
Welding Process :	SAW
Examination Code :	BS EN ISO 17636
Acceptance Code:	BS EN ISO 15614-1 ; 2017
Examination Date:	15 May 2018

Procedure No:	NT/XRT/ISO REV 1.0
IQI type :	DIN FE 10-16
Film Manufacturer/Type :	FUJI 50(class I)
Density :	2.0 - 3.5
Sensitivity:	0.33mm(5 wires visible)
Source to Object Distance :	400mm
Source Side of Object to Film Distance:	(15+3)mm
No of Radiograph(exposure) :	Single Exposure
No. of Film Each Cassette :	1 Film
Radiographic Technique :	SWSI
Film Viewing Technique :	Single Wall Viewing
Source Type/Size :	Iridium192 (3.2mm)
Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
See Hong Yeong 660213-08-6199 (W-010) 1G	18	3	–	15	0 - 1	NRI	Accept	

End of Report

Legend:

TI : Tungsten Inclusion	NRI : No Relevant Indication	UN : Undercut	Por : Porosity	WT : Weld Thickness
SI : Slag Inclusion	LP : Lack of Penetration	Con : Concavity	BT : Burn Through	RT : Reinforcement Thickness
LF : Lack of Fusion	EP : Excess Penetration	AR : Artifact	Sur : Surface	

Personnel Particulars

Radiographer : Emirsham - NDT Lev. II

Interpreted & Evaluated By: M.Nazib - NDT Lev.II

Date: 16 May 2018

Client Representative:

Name:

Date:

NUSANTARA TECHNOLOGIES SDN. BHD. (187753-D)
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Our Ref. : NT/103679/18-06

Report No: NDT/RT/180549-06/18

RADIOGRAPHIC EXAMINATION REPORT

Client and Testing Particulars

Client :	PMI-Technology Sdn Bhd
Project :	PMI-WPS-AS-10H/10H-G-125
Material:	SA 790 UNS S32205 TP SA 240 790 S32205
Welding Process :	GTAW
Examination Code :	ASME V
Acceptance Code:	ASME Section IX ; 2017 Edition.
Examination Date:	15 May 2018

Procedure No:	NT/RT/ASME Rev 7.0
IQI type :	ASTM 1B
Film Manufacturer/Type :	FUJI 50(class I)
Density :	2.0 - 3.5
Sensitivity:	0.33mm(5 wires visible)
Source to Object Distance :	88.9mm
Source Side of Object to Film Distance:	(7.62+3)mm
No of Radiograph(exposure) :	Single Exposure
No. of Film Each Cassette :	1 Film
Radiographic Technique :	DWSI
Film Viewing Technique :	Single Wall Viewing
Source Type/Size :	Iridium192 (3.2mm)
Location Markers :	Film Side

Radiographic Examination Result

Weld Reference (Welder No)	WT (mm)	RT (mm)	Pipe Diameter (mm)	Material Thickness (mm)	Film Position	Film Interpretation	Result	Remarks
Lee Choong Yuen 670328-08-5194 (W-002)								
TP-1 6G	10.62	3	88.9	7.62	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 0	NRI	Accept	
TP-2 6G	10.62	3	88.9	7.62	0 - 1	NRI	Accept	
					1 - 2	NRI	Accept	
					2 - 0	NRI	Accept	

End of Report

Legend:

TI : Tungsten Inclusion	NRI : No Relevant Indication	UN : Undercut	Por : Porosity	WT : Weld Thickness
SI : Slag Inclusion	LP : Lack of Penetration	Con : Concavity	BT : Burn Through	RT : Reinforcement Thickness
LF : Lack of Fusion	EP : Excess Penetration	AR : Artifact	Sur : Surface	

Personnel Particulars

Radiographer :	Emirsham - NDT Lev. II
Interpreted & Evaluated By:	M.Nazib - NDT Lev.II
Date:	16 May 2018

Client Representative:

Name:
Date: